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PRINCIPAL LHCC DELIBERATIONS

8TH MEETING OF THE COMPUTING RESOURCES REVIEW BOARD

18 OCTOBER 2005

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GENERAL

This document summarises the principal LHCC deliberations concerning the LHC Computing Grid (LCG) Project at the Committee's sessions in May and June 2005.

It is realistic to expect the LCG Project to have prototyped, built and commissioned the initial LHC computing environment suitable for LHC operation starting in 2007.

CONCERNS FROM THE PREVIOUS COMPUTING RESOURCES REVIEW BOARD

SUB-SYSTEM	CONCERN	STATUS
Applications Area	Insufficient coordination between Applications Area and ROOT. Imminent reduction of manpower due to the transition from the development to the deployment, maintenance and support phases.	The LHCC concurs with the merger of the ROOT and SEAL core libraries and services. Planning for future manpower requirements is underway.
Fabric Area	Limited performance of CASTOR and dCache Storage Resource Managers (SRMs).	The required features of the SRM functionality have been agreed and have been used in Service Challenge 3 (SC3).

LCG SUB-AREAS

MANAGEMENT AND PLANNING

Planning for the LCG computing procurement is underway and the LCG and experiments are working on defining the baseline services for early LHC operations.

GRID DEPLOYMENT AND REGIONAL CENTRES

The on-going Service Challenge 3 (SC3) has the aim of testing disk-to-tape transfers, to include a few Tier-2 centres and to be run as a production service. The experiments expect that the SC3 will lead to a real production service by the end of 2005, representing a realistic build-up to the LHC service.

MIDDLEWARE PROJECTS

Good progress was reported on the Middleware Projects. ARDA – A Realisation of Distributed Analysis - is a project of the LCG whose main activity is to enable LHC analysis on the Grid. ARDA

is successfully using the gLITE prototype (being developed by the EGEE project) and is preparing for larger scale demonstrations of the new Middleware capabilities. The Committee expressed concern about how the migration to gLite will be accomplished while the sites are still maintaining a production service.

APPLICATIONS AREA

The second phase of the Applications Area is being planned and the corresponding planning document is being prepared. The major proposed change to the Applications Area is the merger of ROOT and the SEAL core libraries and services. The Committee concurs with the conclusions of the internal Application Areas review, whereby the evolution plan is considered to be technically reasonable and is supported by all experiments. The referees expressed some concern at the possibility of duplication of effort or that effort will be put on projects that will have no users. Moreover, the level of the required manpower to accomplish the tasks must be verified.

COMPUTING TECHNICAL DESIGN REPORT

The LHCC is currently reviewing the LCG Computing Technical Design Report.